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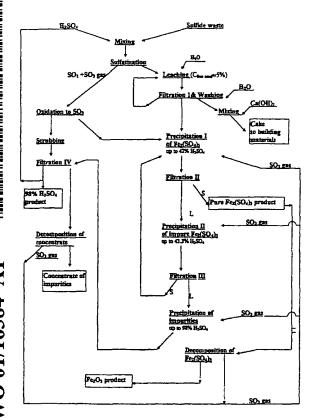
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(54) Title: SULFATISATION PROCESS FOR METAL EXTRACTION FROM SULFIDE ORES



(57) Abstract: The invention provides a hydrometallurgical process for treating metal-containing sulfide ores and concentrates, comprising reacting said metal-containing sulfide with concentrated sulfuric acid at a temperature of between about 300 °C and 400 °C in the presence of oxygen to produce a solid metal sulfate product and a gaseous product which is primarily SO₃, wherein said metal is selected from the group consisting of iron, copper, zinc, nickel, cobalt and manganese. Said metal sulfate product is then leached with dilute sulfuric acid to form a metal-containing solution, from which the metal values are separated by precipitation at raised H₂SO₄-concentrations obtained by saturating the solution with the gaseous SO₃ from the sulfatization reaction step.

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